

**A NEW SPECIES OF AGERIIDAE FROM VENEZUELA PREDACEOUS
ON SCALE INSECTS**

(LEPIDOPTERA: YPONOMEUTOIDEA)

W. DONALD DUCKWORTH, *Department of Entomology, Smithsonian Institution,
Washington, D. C. 20560*

ABSTRACT—A new species of Aegeriidae, *Synanthedon coecidivora*, predaceous on scale insects is described from Venezuela.

The following new species of aegeriid was submitted for identification by Mr. Alfredo D'Ascoli, Facultad de Agronomia, Universidad Central de Venezuela in connection with his biological studies of scale insects in Venezuela. Of particular interest is the habit of the larva of preying on scale insects of the genus *Ceroplastes* Gray. This curious food preference has been reported only once previously in the literature for a species of aegeriid described by Bradley (1956) from West Africa. It is interesting that in both instances the prey belonged to the same genus, *Ceroplastes*.

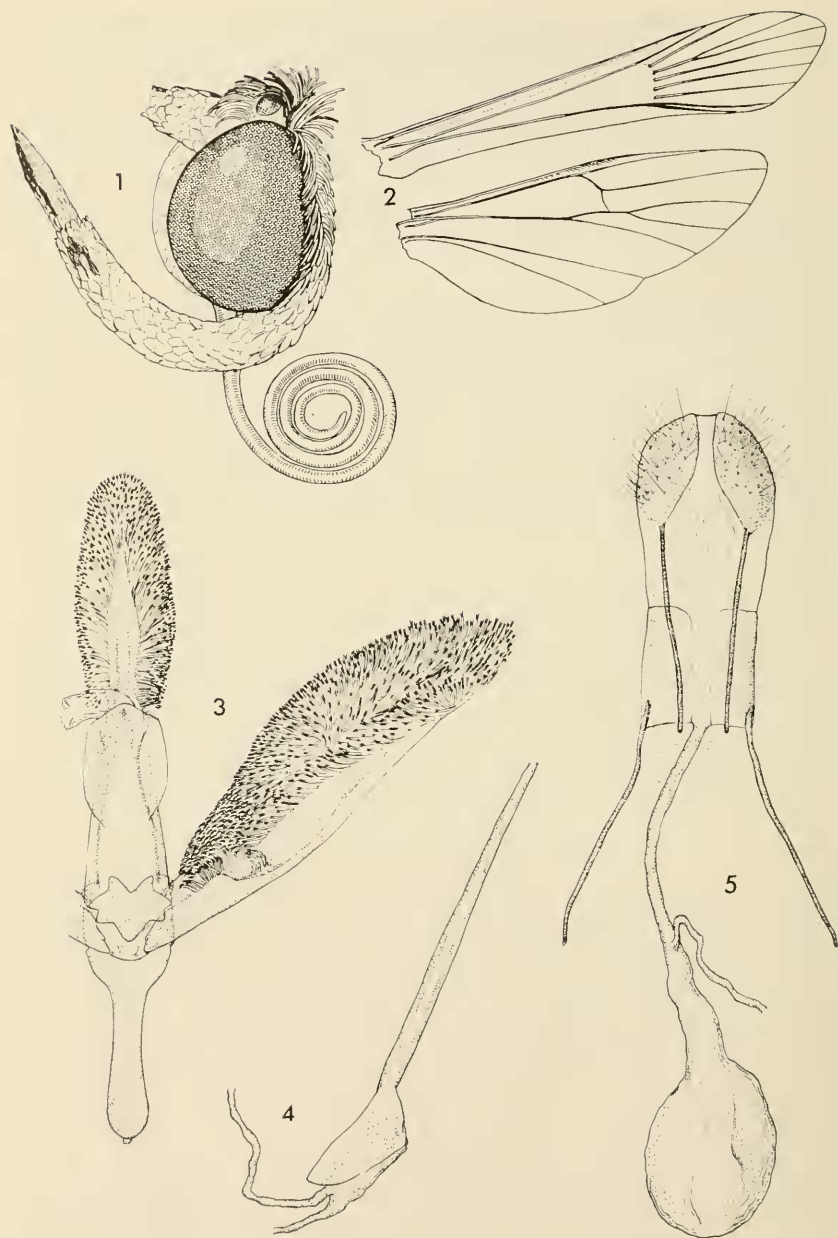
A detailed account of the biology of both the prey and the predator will be provided in a forthcoming paper by Mr. D'Ascoli.

I would like to acknowledge with thanks the assistance of Mrs. Elsie Froeschner who provided the line drawings and the National Museum of Natural History Photographic Laboratory for the photographic work. Particular thanks is due Dr. Margaret R. MacKay, Canada Department of Agriculture, who kindly consented to study the larva of this species. Her results appear in the following paper.

***Synanthedon coecidivora*, n. sp.**

(Fig. 1-6)

Male.—Antenna blue-black above with anterior edge of basal third pale yellow, reddish-brown below, dilated apically, a short apical tuft. Tongue well developed. Labial palpus pale yellow, lateral surface of first segment and apex shaded with blue-black. Head blue-black with few scales on occiput and entire face pale yellow, pale yellow scales surrounding eye ventrally and posteriorly. Thorax blue-black, two lateral lines of pale yellow extending from anterior margin of mesothorax to posterior margin of metathorax. Forewing with veins blue-black, costal margin dusted with pale yellow scales, cilia dark fuscous. Hindwing with veins blue-black; costa pale yellow; cross vein between 3 plus 4 and 5 without scales; cilia blue-black. Ventral surface of prothoracic coxa pale yellow; femur blue-black; tibia blue-black medially, pale yellow laterally and distally; tarsi blue-black ventrally, yellow dorsally and at apices of each segment. Mesothoracic leg blue-black; tibia heavily shaded with pale yellow; tarsal segments ringed with pale yellow apices. Metathoracic coxa pale yellow; femur blue-black; tibia blue-black with median ring of pale yellow, tibial spurs pale yellow; tarsi blue-black shaded with pale yellow. Abdomen blue-black dorsally, segments 1



Figs. 1-5. *Synanthedon coccidivora*, n. sp.: 1, lateral view of head; 2, wing venation; 3, ventral view of male genitalia (right valve and aedeagus removed); 4, lateral view of aedeagus; 5, ventral view of female genitalia.

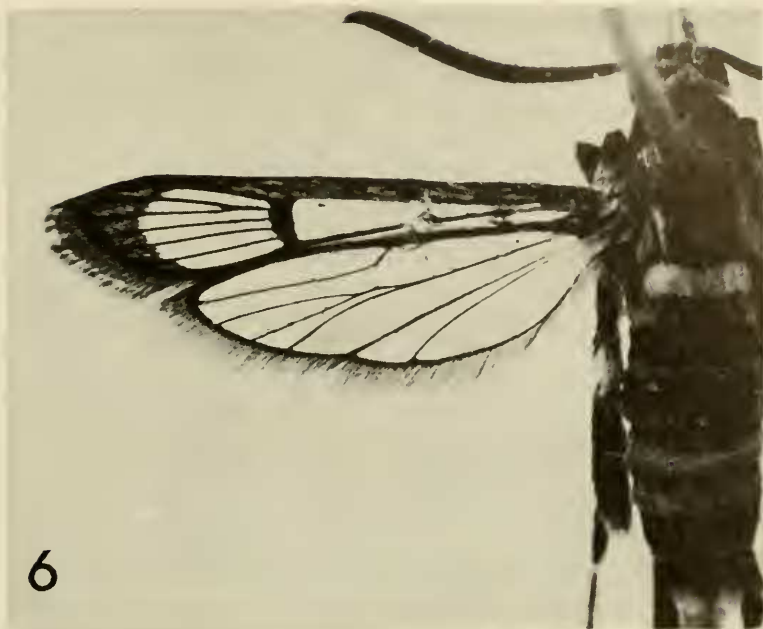


Fig. 6. *Synanthedon coccidivora*, n. sp.

and 4 banded with pale yellow; pale yellow ventrally; anal tuft edged with pale yellow.

Male genitalia as in figs. 3 and 4 (W.D.D. slide no. 3773).

Alar expanse of male 12–14 mm.

Female.—Maculation as for male except prothoracic coxa heavily shaded with blue-black.

Female genitalia as in fig. 5 (W.D.D. slide no. 3774).

Alar expanse of female 14–17 mm.

Host.—Coccidae, *Ceroplastes caesalpiniae* Reyne on *Acacia tortuosa* (Leguminosae).

Types.—Holotype: male, Cata, Aragua, Venezuela, 7.III.67, en *Ceroplastes*, A. D'Ascoli; W.D.D. ♂ genitalia slide no. 3769 [U.S.N.M. Type No. 70719]. Paratypes 5 males, 16 females same data as holotype; 1 male, 2 females same locality as holotype, 19.II.68. One male and one female paratype in the collection of the Facultad de Agronomía, Universidad Central de Venezuela, remainder in the U. S. National Museum.

Discussion.—As pointed out in the following paper on the larva it is very likely that this species belongs in a separate genus, however, the current status of the adult taxonomy in the family coupled with the small amount of information concerning the Neotropical aegeriid

fauna makes the inclusion of this species in *Synanthedon* Huebner more advisable at this time than establishing a new genus. An alternate approach would have been to place it with the other known coccid-feeding species, *idiotropha*, for which Bradley described a new genus *Ceritrypetes*. Such a placement was ruled out after careful study of Bradley's generic description which uses the absence of vein 5 in the forewing as the principal character to separate *Ceritrypetes* from *Synanthedon* yet in the body of the description vein 5 is noted as missing from the hindwing. This is further confused by the illustration of the venation which shows vein 5 present in both wings! In addition, the illustration of the male genitalia of *idiotropha* provided by Bradley indicates the uncus of that species much reduced whereas in *coccidivora* the uncus consists of large flaring lobes thickly clothed with long thick setae with bifurcated tips characteristic of the *Synanthedonini*.

From the discussion above it is obvious that there remains a considerable amount of work to be done on the adult taxonomy of the Aegeriidae especially at the higher category level. This is especially true in light of the recent changes proposed by MacKay (1968) in her excellent study of the larvae of the North American species.

REFERENCES

- Bradley, J. D. 1956. A new clearwing moth from West Africa predaceous on Scale-Insects (Lep.: Aegeriidae). *The Entomologist* 89(1119):203-205.
MacKay, M. R. 1968. The North American Aegeriidae (Lepidoptera): A revision based on late-instar larvae. *Mem. Ent. Soc. Can.* 58:1-112.

THE LARVA OF *SYNANTHEDON COCCIDIVORA* DUCKWORTH (LEPIDOPTERA: AEGERIIDAE)¹

MARGARET R. MACKAY, *Entomology Research Institute, Research Branch,
Canada Department of Agriculture, Ottawa, Ontario*

ABSTRACT—The larva of *Synanthedon coccidivora* Duckworth from Venezuela, a predator on *Ceroplastes caesalpiniae* Reyne (Coccidae), is described.

Larvae of the South American aegeriid, *Synanthedon coccidivora* Duckworth (Duckworth, 1969), were sent to me for examination by Dr. W. D. Duckworth of the United States National Museum. They are of unusual interest, in that they feed on scale insects and differ in several characters from larvae of all other species that I have so far examined. They are described and illustrated here.

¹ Immediate publication secured by full payment of page charges—Editor.